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 gcccggctt cgtccacaca tcggatccat ccaagccaga caacctgcgt cgcttgc 1260
 tggAACACGA ggccctggac ttggggaga tctacctctg gaagctggta aaagatgagg 1320
 aaactgaggc tcaagagaggta gaagtacctg gccaaggcc acacaggccag aatcttccac 1380
 ttgactcaga tcaagaaagt caggaagcaa gacttccaga aagaggcaca gcacttccga 1440
 ctgctcgctg gccccccacca aggtcactgg aacgtcttcc tagccagac cctggagctg 1500
 aaggtaacgg ccagtccaga caaagtggc aagacataac aaagactaa cagttgcaga 1560
 tatgagctgt ataattgttg ttattatata ttaataataa agaagttgca taaccatcaa 1620
 aa 1622

<210> 10
 <211> 1567
 <212> DNA
 <213> Homo sapiens

<400> 10
 ggacaaataa aaaggaaaca agcatgattg tgagggcaga ggagcgtgg actgagttag 60
 gagactggtg ctgtcatcg tgcctggta ctgacttgcgt gtgtggccct caggtgtAAC 120
 ttacccttc tgggcctcat ttgtctaataatc acgctgatac catgatataa 180
 atctgtacag catttactg cttgattccc taactgcctt gtgagataag cgtaaggct 240
 cagagacagt ggcatgcaca gtgtgcaca gtaagtgtgt gttaaagccg agattcaaAC 300
 tcagaccttc tggcccttgc ccttagagag catgcccagt tgtctagcag attctttt 360
 gcctgagtgg cccagatgac atctttta gagctagaaa gaaggagaaa tgagacaggg 420
 tcttggctt ggagccttgc gggactaaca tggacttgcgt cggttgcca ggccagaca 480
 tggttcgcct tttccatggg aagagatact cccccggcga gagctggcac ccctacttgg 540
 agccacaagg cctgtatgtac tgcctgcgt gtacctgctc agagggcgcc catgtgagtt 600
 gttaccgcctt ccactgtccg cctgtccact gccccagcc tggacggag ccacagcaat 660
 gctgtccaa gtgtgtggaa cctcacactc cctctggact cggggccccca ccaaagtcc 720
 gccaagcacaa cgggaccatg taccaacacg gagagatctt cagtgcccat gagctgttcc 780
 cctccgcctt gccaaccatg tggctcttgc gtagctgcac agagggccag atctactgcg 840
 gccaagcacaa ctgccccggaa ccaggctgc cagcacccctt cccgtgcac gactcctgt 900

gccaaggctg caaaatggag gaaagtggc aatcggtatga agaggacagt gtgcagtcgc 960
tccatgggt gagacatccat caggatccat gtcccatgtga tgctggaga aagagaggcc 1020
cgggcaccccc agcccccaact ggcctcagcg cccctctgag cttcatccct cgccacttca 1080
gacccaaggg agcaggcagc acaactgtca agatcgtcct gaaggagaaa cataagaaaag 1140
aggacaaagc agaccctggc cacagtgaga tcagttctac caggtgtccc aaggcacccg 1200
gccgggtcct cgtccacaca tcggtatccc caagcccaga caacctgcgt cgcttgcgc 1260
tggAACACGA ggcctcgac ttggtgaga tctacctctg gaagctggta aaaggaatct 1320
tccacttgac tcagatcaag aaagttagga agcaagactt ccagaaagag gcacagcact 1380
tccgactgct cgctggcccc cacgaaggc actggAACGT cttcctAGCC cagaccctgg 1440
agctgaaggt cacggccagt ccagacaaag tgaccaagac ataacaaga cctaacaagtt 1500
gcagatatga gctgtataat ttttttatt atatattaat aaataagaag ttgcataacc 1560
atcaaaa 1567

<210> 11
<211> 1202
<212> DNA
<213> Mouse

<400> 11
atttcttat tcctgatccc acactgctct gcctacccac accagccccca aggtctnaga 60
aagccctgga ggctggcttg ccaaattcctt gtcagtgtnt ttattgatta gtctgagaat 120
atcttagacc tcacccacaa ggttctgtgt ggagcctgtg ctctctgtct gtctgtctgt 180
ctgtctgtct gtctgtctgt ctgcctgcct ctctctgtct gtctccgcct gtctctgtct 240
ctctgtctgt ctctgtctgt ctctctctct ctgtctgtct gtctctgtct 300
ctgtctctct ctctctctca gaagtctctt acgcttctct agcaggcgtc tcatgcagcc 360
tggtttgtgt tcccagctgt ggcctatccc acagacagct ccacatctg cttgctgtc 420
gcagagacat tcccaggatc catgctcggg gaggagaggc cccagcacgc cagccccccac 480
cagccctcgc tcccctctgg gcttcatccn tcgcccacttc cagtcagtag gaatgggcag 540
cacaaccatc aagattatct tgaaggagaa acataaaaaaa gcttgcacac acaatgggaa 600
gacatactcc catggggagg tttggcaccc cactgtgtc tcctttggcc ccatgcctcg 660
catccctgtgc acatgttattt atggctacca ggactgcccac cgtgtgaccc gccccaccca 720
atatccctgc agtcaaccca agaaagtggc tggaaagtgc tgcaagatct gcccagagga 780
cgaggcggaa gatgaccaca gtgagggtcat tttcacccgg tttcccaagg taccaggcc 840
gttccaggtg tacacgttgg catctccaaag cccagacacgc ctacaccgct ttgtcctgg 900
gcatgaagcc tctgaccagg tagagatgtt catttggaaag ctgggtggaaag gaatttacca 960
cttggtttagtcaatcaagagag tcaggaagca agatttccag aaagaggttc agaacttccg 1020
gctgctcacc ggcacccatg aaggttactg gaccgttttc ctagccaga ttccagagct 1080
gaaagttaca gccagccccag acaaagtgc caagacattt tagcaaggac ctaaagagtt 1140
gcagatacga gttttattgg ttttggattt atatattaat aaagaagtgc cattaccctt 1200
tc 1202

<210> 12
<211> 398
<212> PRT
<213> Homo sapiens

<400> 12
Arg Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg Cys Thr Cys Ser Glu
1 5 10 15

Gly Ala His Val Ser Cys Tyr Arg Leu His Cys Pro Pro Val His Cys
20 25 30

Pro Gln Pro Val Thr Glu Pro Gln Gln Cys Cys Pro Lys Cys Val Glu
35 40 45

Pro His Thr Pro Ser Gly Leu Arg Ala Pro Pro Lys Ser Cys Gln His
50 55 60

Asn Gly Thr Met Tyr Gln His Glu Ile Phe Ser Ala His Glu Leu
 65 70 75 80
 Phe Pro Ser Arg Leu Pro Asn Gln Cys Val Leu Cys Ser Cys Thr Glu
 85 90 95
 Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro
 100 105 110
 Ala Pro Leu Pro Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu
 115 120 125
 Ala Ser Glu Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly
 130 135 140
 Val Arg His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg
 145 150 155 160
 Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe
 165 170 175
 Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val Lys
 180 185 190
 Ile Val Leu Lys Glu Lys His Xaa Lys Ala Cys Val His Gly Gly Lys
 195 200 205
 Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg Ala Phe Gly
 210 215 220
 Pro Cys Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly Arg Gln Asp Cys
 225 230 235 240
 Gln Arg Val Thr Cys Pro Thr Lys Tyr Pro Cys Arg His Pro Glu Lys
 245 250 255
 Val Ala Gly Lys Cys Cys Lys Ile Cys Pro Glu Asp Lys Ala Asp Pro
 260 265 270
 Gly His Ser Glu Ile Ser Ser Thr Arg Cys Pro Lys Ala Pro Gly Arg
 275 280 285
 Val Leu Val His Thr Ser Val Ser Pro Ser Pro Asp Asn Leu Arg Arg
 290 295 300
 Phe Ala Leu Glu His Glu Ala Ser Asp Leu Val Glu Ile Tyr Leu Trp
 305 310 315 320
 Lys Leu Val Lys Asp Glu Glu Thr Glu Ala Gln Arg Gly Glu Val Pro
 325 330 335
 Gly Pro Arg Pro His Ser Gln Asn Phe His Leu Thr Gln Ile Lys Lys
 340 345 350
 Val Arg Lys Gln Asp Phe Gln Lys Glu Ala Gln His Phe Arg Leu Leu
 355 360 365
 Ala Gly Pro His Glu Gly His Trp Asn Val Phe Leu Ala Gln Thr Leu
 370 375 380
 Glu Leu Lys Val Thr Ala Ser Pro Asp Lys Val Thr Lys Thr

385

390

395

<210> 13
<211> 539
<212> PRT
<213> Homo sapiens

<400> 13
Ser Pro Leu Pro Ser Ala Gly Pro Ser Phe Val Ser Pro Ser Leu Pro
1 5 10 15
Pro Phe Pro Ala Phe Ser Phe His Leu Ser Leu Leu Pro Thr Leu Asp
20 25 30
Leu Pro Ser Cys Pro Pro Phe Leu Pro Thr Ala Ala Ser Trp Pro Phe
35 40 45
Ser Asp Pro Ala Leu Ala Ala Asp Leu Leu Gly Ser Cys Gly Leu Ile
50 55 60
Cys Gly Pro Cys Xaa Ser Val Ser Phe Ser Ser Pro Val Leu Pro Thr
65 70 75 80
Pro Leu Pro Asp Gln Arg Pro Asp Pro Gly Glu Arg Met Val Pro Glu
85 90 95
Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala Leu Leu Trp Phe Pro
100 105 110
Leu Asp Ser His Ala Arg Ala Arg Pro Asp Met Phe Cys Leu Phe His
115 120 125
Gly Lys Arg Tyr Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro
130 135 140
Gln Gly Leu Met Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His
145 150 155 160
Val Ser Cys Tyr Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro
165 170 175
Val Thr Glu Pro Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr
180 185 190
Pro Ser Gly Leu Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr
195 200 205
Met Tyr Gln His Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser
210 215 220
Arg Leu Pro Asn Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile
225 230 235 240
Tyr Cys Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu
245 250 255
Pro Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu
260 265 270
Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His

275	280	285
Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly		
290	295	300
Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg		
305	310	315
His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu		
325	330	335
Lys Glu Lys His Xaa Lys Ala Cys Val His Gly Gly Lys Thr Tyr Ser		
340	345	350
His Gly Glu Val Trp His Pro Ala Phe Arg Ala Phe Gly Pro Cys Pro		
355	360	365
Cys Ile Leu Cys Thr Cys Glu Asp Gly Arg Gln Asp Cys Gln Arg Val		
370	375	380
Thr Cys Pro Thr Lys Tyr Pro Cys Arg His Pro Glu Lys Val Ala Gly		
385	390	395
Lys Cys Cys Lys Ile Cys Pro Glu Asp Lys Ala Asp Pro Gly His Ser		
405	410	415
Glu Ile Ser Ser Thr Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val		
420	425	430
His Thr Ser Val Ser Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu		
435	440	445
Glu His Glu Ala Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val		
450	455	460
Lys Asp Glu Glu Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg		
465	470	475
480		
Pro His Ser Gln Asn Phe His Leu Thr Gln Ile Lys Lys Val Arg Lys		
485	490	495
Gln Asp Phe Gln Lys Glu Ala Gln His Phe Arg Leu Leu Ala Gly Pro		
500	505	510
His Glu Gly His Trp Asn Val Phe Leu Ala Gln Thr Leu Glu Leu Lys		
515	520	525
Val Thr Ala Ser Pro Asp Lys Val Thr Lys Thr		
530	535	

<210> 14
<211> 388
<212> PRT
<213> Homo sapiens

<400> 14
Ile Ser Ser Trp Gly Gln Met Gln Asn His Gln Lys Ser Gly Leu Val
1 5 10 15

Asn Phe Ser Lys Asp Ser His Glu Thr Ser Phe Ser Ser Ser Cys

20	25	30
Pro Ser Pro Thr Val Glu Pro His Thr Pro Ser Gly Leu Arg Ala Pro		
35	40	45
Prc Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His Gly Glu Ile		
50	55	60
Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn Gln Cys Val		
65	70	75
Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys		
85	90	95
Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp Ser Cys Cys		
100	105	110
Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu Glu Asp Ser		
115	120	125
Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro Cys Ser Ser		
130	135	140
Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu		
145	150	155
Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro Lys Gly Ala		
165	170	175
Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His Xaa Lys Ala		
180	185	190
Cys Val His Gly Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro		
195	200	205
Ala Phe Arg Ala Phe Gly Pro Cys Pro Cys Ile Leu Cys Thr Cys Glu		
210	215	220
Asp Gly Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Lys Tyr Pro		
225	230	235
Cys Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro		
245	250	255
Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg Cys		
260	265	270
Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser Pro Ser		
275	280	285
Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser Asp Leu		
290	295	300
Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr Glu Ala		
305	310	320
Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn Phe His		
325	330	335
Leu Thr Gln Ile Lys Lys Val Arg Lys Gln Asp Phe Gln Lys Glu Ala		
340	345	350

Gln His Phe Arg Leu Leu Ala Gly Pro His Glu Gly His Trp Asn Val
 355 360 365

Phe Leu Ala Gln Thr Leu Glu Leu Lys Val Thr Ala Ser Pro Asp Lys
 370 375 380

Val Thr Lys Thr
 385

<210> 15
 <211> 439
 <212> PRT
 <213> Homo sapiens

<400> 15
 Asp Arg Val Phe Gly Leu Glu Pro Pro Gly Thr Asn Met Ala Leu Val
 1 5 10 15

Gly Leu Pro Gly Pro Asp Met Phe Cys Leu Phe His Gly Lys Arg Tyr
 20 25 30

Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met
 35 40 45

Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr
 50 55 60

Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro
 65 70 75 80

Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu
 85 90 95

Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 100 105 110

Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn
 115 120 125

Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu
 130 135 140

Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp
 145 150 155 160

Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu
 165 170 175

Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro
 180 185 190

Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro
 195 200 205

Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro
 210 215 220

Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His
 225 230 235 240

Xaa Lys Ala Cys Val His Gly Gly Lys Thr Tyr Ser His Gly Glu Val
 245 250 255

Trp His Pro Ala Phe Arg Ala Phe Gly Pro Cys Pro Cys Ile Leu Cys
 260 265 270

Thr Cys Glu Asp Gly Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr
 275 280 285

Lys Tyr Pro Cys Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys
 290 295 300

Ile Cys Pro Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser
 305 310 315 320

Thr Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val
 325 330 335

Ser Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala
 340 345 350

Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu
 355 360 365

Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His Ser Gln
 370 375 380

Asn Phe His Leu Thr Gln Ile Lys Lys Val Arg Lys Gln Asp Phe Gln
 385 390 395 400

Lys Glu Ala Gln His Phe Arg Leu Leu Ala Gly Pro His Glu Gly His
 405 410 415

Trp Asn Val Phe Leu Ala Gln Thr Leu Glu Leu Lys Val Thr Ala Ser
 420 425 430

Pro Asp Lys Val Thr Lys Thr
 435

<210> 16

<211> 549

<212> PRT

<213> Homo sapiens

<400> 16

Thr Phe Pro Leu Ser Leu Ile Ala Ser Pro Phe Cys Trp Thr Phe Leu
 1 5 10 15

Arg Leu Ser Ile Ser Pro Ser Phe Pro Arg Val Leu Phe Pro Pro Phe
 20 25 30

Ser Ser Ser His Leu Arg Pro Pro Phe Leu Pro Ser Phe Pro Ala His
 35 40 45

Arg Cys Phe Leu Ala Leu Leu Arg Pro Arg Ser Ser Ser Arg Pro Pro
 50 55 60

Gly Val Cys Gly Leu Ile Cys Gly Pro Cys Ala Ser Val Ser Phe Ser
 65 70 75 80

Ser Pro Phe Leu Pro Thr Pro Leu Pro Asp Gln Arg Pro Asp Pro Gly
 85 90 95
 Glu Arg Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu
 100 105 110
 Ala Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
 115 120 125
 Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser Trp
 130 135 140
 His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg Cys Thr
 145 150 155 160
 Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His Cys Pro Pro
 165 170 175
 Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln Cys Cys Pro Lys
 180 185 190
 Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg Ala Pro Pro Lys Ser
 195 200 205
 Cys Gln His Asn Gly Thr Met Tyr Gln His Gly Glu Ile Phe Ser Ala
 210 215 220
 His Glu Leu Phe Pro Ser Arg Leu Pro Asn Gln Cys Val Leu Cys Ser
 225 230 240
 Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys Pro Glu Pro
 245 250 255
 Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp Ser Cys Cys Gln Ala Cys
 260 265 270
 Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu Glu Asp Arg Val Gln Ser
 275 280 285
 Leu His Gly Val Arg His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly
 290 295 300
 Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro
 305 310 315 320
 Leu Ser Phe Ile Pro Arg His Phe Ile Pro Lys Gly Ala Gly Ser Thr
 325 330 335
 Thr Val Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His
 340 345 350
 Gly Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg
 355 360 365
 Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly Arg
 370 375 380
 Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys Arg His
 385 390 395 400

Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro Glu Asp Lys
405 410 415

Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg Cys Pro Lys Ala
420 425 430

Pro Gly Arg Val Leu Val His Thr Ser Val Ser Pro Ser Pro Asp Asn
435 440 445

Leu Arg Arg Phe Ala Leu Glu His Ala Ser Asp Leu Val Glu Ile
450 455 460

Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr Glu Ala Gln Arg Gly
465 470 475 480

Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn Leu Pro Leu Asp Ser
485 490 495

Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro Glu Arg Gly Thr Ala Leu
500 505 510

Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser
515 520 525

Pro Asp Pro Gly Ala Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln
530 535 540

Asp Ile Thr Lys Thr
545

<210> 17
<211> 549
<212> PRT
<213> Homo sapiens

<400> 17
Thr Phe Pro Leu Ser Leu Ile Ala Ser Pro Phe Cys Trp Thr Phe Leu
1 5 10 15

Arg Leu Ser Ile Ser Pro Ser Phe Pro Arg Val Leu Phe Pro Pro Phe
20 25 30

Ser Ser Ser His Leu Arg Pro Pro Phe Leu Pro Ser Phe Pro Ala His
35 40 45

Arg Cys Phe Leu Ala Leu Leu Arg Pro Arg Ser Ser Arg Pro Pro
50 55 60

Gly Val Cys Gly Leu Ile Cys Gly Pro Cys Ala Ser Val Ser Phe Ser
65 70 75 80

Ser Pro Phe Leu Pro Thr Pro Leu Pro Asp Gln Arg Pro Asp Pro Gly
85 90 95

Glu Arg Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu
100 105 110

Ala Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
115 120 125

Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser Trp
 130 135 140
 His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg Cys Thr
 145 150 155 160
 Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His Cys Pro Pro
 165 170 175
 Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln Cys Cys Pro Lys
 180 185 190
 Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg Ala Pro Pro Lys Ser
 195 200 205
 Cys Gln His Asn Gly Thr Met Tyr Gln His Gly Glu Ile Phe Ser Ala
 210 215 220
 His Glu Leu Phe Pro Ser Arg Leu Pro Asn Gln Cys Val Leu Cys Ser
 225 230 235 240
 Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys Pro Glu Pro
 245 250 255
 Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp Ser Cys Cys Gln Ala Cys
 260 265 270
 Lys Gly Glu Ala Ser Glu Gln Ser Asp Glu Glu Asp Ser Val Gln Ser
 275 280 285
 Leu His Gly Val Arg His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly
 290 295 300
 Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro
 305 310 315 320
 Leu Ser Phe Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr
 325 330 335
 Thr Val Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His
 340 345 350
 Gly Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg
 355 360 365
 Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly Arg
 370 375 380
 Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys Arg His
 385 390 395 400
 Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro Glu Asp Lys
 405 410 415
 Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg Cys Pro Lys Ala
 420 425 430
 Pro Gly Arg Val Leu Val His Thr Ser Val Ser Pro Ser Pro Asp Asn
 435 440 445
 Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser Asp Leu Val Glu Ile

450

455

460

Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr Glu Ala Gln Arg Gly
 465 470 475 480

Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn Leu Pro Leu Asp Ser
 485 490 495

Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro Glu Arg Gly Thr Ala Leu
 500 505 510

Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser
 515 520 525

Pro Asp Pro Gly Ala Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln
 530 535 540

Asp Ile Thr Lys Thr
 545

<210> 18

<211> 392

<212> PRT

<213> Homo sapiens

<400> 18

Ile Ser Ser Trp Gly Gln Met Gln Asn His Gln Lys Ser Gly Leu Val
 1 5 10 15

Asn Phe Ser Lys Asp Ser His Glu Thr Ser Phe Ser Ser Ser Cys
 20 25 30

Pro Ser Pro Thr Ala Glu Pro His Thr Pro Ser Gly Leu Arg Ala Pro
 35 40 45

Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His Gly Glu Ile
 50 55 60

Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn Gln Cys Val
 65 70 75 80

Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys
 85 90 95

Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Asp Ser Cys Cys
 100 105 110

Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu Glu Asp Ser
 115 120 125

Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro Cys Ser Ser
 130 135 140

Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu
 145 150 155 160

Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro Lys Gly Ala
 165 170 175

Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala

180	185	190
Cys Val His Gly Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro		
195	200	205
Ala Phe Arg Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu		
210	215	220
Asp Gly Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro		
225	230	235
240		
Cys Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro		
245	250	255
Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg Cys		
260	265	270
Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser Pro Ser		
275	280	285
Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser Asp Leu		
290	295	300
Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr Glu Ala		
305	310	315
320		
Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn Leu Pro		
325	330	335
Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro Glu Arg Gly		
340	345	350
Thr Ala Leu Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser Leu Glu Arg		
355	360	365
Leu Pro Ser Pro Asp Pro Gly Ala Glu Gly His Gly Gln Ser Arg Gln		
370	375	380
Ser Asp Gln Asp Ile Thr Lys Thr		
385	390	
<210> 19		
<211> 443		
<212> PRT		
<213> Homo sapiens		
<400> 19		
Asp Arg Val Phe Gly Leu Glu Pro Pro Gly Thr Asn Met Ala Leu Val		
1	5	10
		15
Gly Leu Pro Gly Pro Asp Met Phe Cys Leu Phe His Gly Lys Arg Tyr		
20	25	30
Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met		
35	40	45
Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr		
50	55	60
Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro		

65	70	75	80
Gln Gln Cys Cys Pro Lys Cys Val Glu Prc His Thr Pro Ser Gly Leu			
85	90	95	
Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His			
100	105	110	
Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn			
115	120	125	
Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu			
130	135	140	
Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp			
145	150	155	160
Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu			
165	170	175	
Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro			
180	185	190	
Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro			
195	200	205	
Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro			
210	215	220	
Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His			
225	230	235	240
Lys Lys Ala Cys Val His Gly Gly Lys Thr Tyr Ser His Gly Glu Val			
245	250	255	
Trp His Pro Ala Phe Arg Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys			
260	265	270	
Thr Cys Glu Asp Gly Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr			
275	280	285	
Glu Tyr Pro Cys Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys			
290	295	300	
Ile Cys Pro Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser			
305	310	315	320
Thr Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val			
325	330	335	
Ser Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala			
340	345	350	
Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu			
355	360	365	
Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His Ser Gln			
370	375	380	
Asn Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro			
385	390	395	400

Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser
 405 410 415
 Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala Glu Gly His Gly Gln
 420 425 430
 Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys Thr
 435 440

<210> 20
 <211> 378
 <212> PRT
 <213> Homo sapiens

<400> 20
 Asp Arg Val Phe Gly Leu Glu Pro Pro Gly Thr Asn Met Ala Leu Val
 1 5 10 15

Gly Leu Pro Gly Pro Asp Met Phe Cys Leu Phe His Gly Lys Arg Tyr
 20 25 30

Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met
 35 40 45

Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr
 50 55 60

Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro
 65 70 75 80

Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu
 85 90 95

Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 100 105 110

Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn
 115 120 125

Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu
 130 135 140

Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp
 145 150 155 160

Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu
 165 170 175

Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro
 180 185 190

Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro
 195 200 205

Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro
 210 215 220

Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His
 225 230 235 240

Lys Lys Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr
 245 250 255

Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser
 260 265 270

Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser
 275 280 285

Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr
 290 295 300

Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn
 305 310 315 320

Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro Glu
 325 330 335

Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser Leu
 340 345 350

Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala Glu Gly His Gly Gln Ser
 355 360 365

Arg Gln Ser Asp Gln Asp Ile Thr Lys Thr
 370 375

<210> 21
<211> 356
<212> PRT
<213> Homo sapiens

<400> 21
Asp Arg Val Phe Gly Leu Glu Pro Pro Gly Thr Asn Met Ala Leu Val
 1 5 10 15

Gly Leu Pro Gly Pro Asp Met Phe Cys Leu Phe His Gly Lys Arg Tyr
 20 25 30

Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met
 35 40 45

Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr
 50 55 60

Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro
 65 70 75 80

Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu
 85 90 95

Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 100 105 110

Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn
 115 120 125

Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu
 130 135 140

Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp
 145 150 155 160
 Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu
 165 170 175
 Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro
 180 185 190
 Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro
 195 200 205
 Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro
 210 215 220
 Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His
 225 230 235 240
 Lys Lys Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr
 245 250 255
 Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser
 260 265 270
 Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser
 275 280 285
 Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Gly Ile Phe His
 290 295 300
 Leu Thr Gln Ile Lys Lys Val Arg Lys Gln Asp Phe Gln Lys Glu Ala
 305 310 315 320
 Gln His Phe Arg Leu Leu Ala Gly Pro His Glu Gly His Trp Asn Val
 325 330 335
 Phe Leu Ala Gln Thr Leu Glu Leu Lys Val Thr Ala Ser Pro Asp Lys
 340 345 350
 Val Thr Lys Thr
 355

<210> 22
 <211> 397
 <212> PRT
 <213> Mouse

<400> 22
 Phe Leu Tyr Ser Ser His Thr Ala Leu Pro Thr His Thr Ser Pro Lys
 1 5 10 15

Val Xaa Glu Ser Pro Gly Gly Trp Leu Ala Lys Ser Leu Ser Val Xaa
 20 25 30

Leu Leu Ile Ser Leu Arg Ile Ser Thr Ser Pro Thr Arg Phe Cys Val
 35 40 45

Glu Pro Val Leu Ser Val Cys Leu Ser Val Cys Leu Ser Val Cys Leu
 50 55 60

Ser Ala Cys Leu Ser Leu Ser Val Ser Val Cys Leu Cys Leu Ser Val
 65 70 75 80
 Cys Leu Cys Leu Ser Leu Ser Leu Cys Leu Ser Leu Cys Leu Cys Leu
 85 90 95
 Cys Leu Cys Leu Ser Leu Ser Leu Arg Ser Pro Leu Ala Phe Ser Ser
 100 105 110
 Arg Arg Leu Met Gln Pro Gly Trp Cys Ser Gln Leu Trp Pro Ile Pro
 115 120 125
 Gln Thr Ala Pro His Pro Ala Cys Cys Ser Gln Arg His Ser Gln Asp
 130 135 140
 Pro Cys Ser Glu Arg Arg Gly Pro Ser Thr Pro Ala Pro Thr Ser Leu
 145 150 155 160
 Ser Ser Pro Leu Gly Phe Ile Xaa Arg His Phe Gln Ser Val Gly Met
 165 170 175
 Gly Ser Thr Thr Ile Lys Ile Ile Leu Lys Glu Lys His Lys Lys Ala
 180 185 190
 Cys Thr His Asn Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro
 195 200 205
 Thr Val Leu Ser Phe Gly Pro Met Pro Cys Ile Leu Cys Thr Cys Ile
 210 215 220
 Asp Gly Tyr Gln Asp Cys His Arg Val Thr Cys Pro Thr Gln Tyr Pro
 225 230 235 240
 Cys Ser Gln Pro Lys Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro
 245 250 255
 Glu Asp Glu Ala Glu Asp Asp His Ser Glu Val Ile Ser Thr Arg Cys
 260 265 270
 Pro Lys Val Pro Gly Gln Phe Gln Val Tyr Thr Leu Ala Ser Pro Ser
 275 280 285
 Pro Asp Ser Leu His Arg Phe Val Leu Glu His Glu Ala Ser Asp Gln
 290 295 300
 Val Glu Met Tyr Ile Trp Lys Leu Val Lys Gly Ile Tyr His Leu Val
 305 310 315 320
 Gln Ile Lys Arg Val Arg Lys Gln Asp Phe Gln Lys Glu Val Gln Asn
 325 330 335
 Phe Arg Leu Leu Thr Gly Thr His Glu Gly Tyr Trp Thr Val Phe Leu
 340 345 350
 Ala Gln Ile Pro Glu Leu Lys Val Thr Ala Ser Pro Asp Lys Val Thr
 355 360 365
 Lys Thr Leu Gln Gly Pro Lys Glu Leu Gln Ile Arg Val Leu Leu Val
 370 375 380

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Leu Leu Leu Tyr Ile Asn Lys Glu Val Ala Leu Pro Phe
395 390 395